Manufacturing & Lab Testing Instrument

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GJ6500 Series DFB Highly Stable Laser Source

Description

GJ6500 bench-top laser source uses high performance DFB laser launcher, highly precise auto power controlling and temperature controlling technology so that both the output wavelength and power have a wonderful short-term and long-term stability. CW mode, inside and outside modulation mode are available on this laser source.

DFB laser source provides narrowband single longitudinal mode laser. The working wavelength can be 1310nm,1490nm and 1550nm. User can choose the right wavelength according to the need.

GJ6500 bench-top laser source can be used in optical communication system, manufacture and testing of optical opponents.

Part Number		Description	
GJ6500-xx x-xx-xxx	-xx	1: Single output port	a: 1550nm b:1310nm c: 1490nm d: 1625nm e: 850nm f:1300nm
		2: Double output port	a: 1310/1550nm b: 1550/1625nm c: 850/1300nm g: 1310/1625nm d: 1310&1550nm e:1550&650nm f: 1550&1625nm h:1310&1550nm i: 1625&650nm j: 850&650nm
	x	F: FP laser luncher D: DFB laser launcher	
	-xx	0.35: 0.35mW 01: 1mW 07: 7mW 15: 15mw	
	-xxx	APC: APC polishing mode PC: PC polishing mode	

Features

- Bench-top, selectable modular type structure
- Selections of flat gain and non-flat gain are available
- High output power, low noise rate
- Working wavelength covers entire C wave band
- Optical module uses pumped laser launcher and erbium-doped fiber both of them are imported with original packaging
- Use advanced auto power controlling circuit and thermoelectric cooler auto temperature controlling circuit to ensure the stability of output optical power and optical spectrum wave form.
- Auto monitor input/output optical power
- Offers RS232 interface to simplify remote monitoring and management

Specification

Technical parameters	
Output wavelength	650nm, 1310/1550nm
Precision	10nm
Spectrum bandwidth	<1(@ -20dB)nm
Output power (selectable)	>7mW(650nm) >1mW(1310/1550dB)
Short term stability	0.05dB/15min
Long term stability	0.1dB/8 hours
Connector type	FC/APC
Operation model	CW/270/1k/2kHz
Working temperature	0 ~ +40°C
Storage temperature	-20 ~+70°C
Power	AC100~240V 50/60Hz
Dimension	260mm*110mm*310mm
Weight	2.5kg

Standard accessories

Power cord, user manual, patchcord(FC/APC - FC/PC)

GJ6560 ASE Broadband Laser Source

Description

Amplified spontaneous emission laser source is called ASE laser source. It is a broadband laser source that widely used in distributed optical fiber, optical grating sensed system, passive optical opponents testing and optical spectrum analyzing.

Features

- Adjustable output power, both wavelength precision and output power have a high stability.
- The color LCD screen offers a friendly setting interface.
- Laser source can output continuous wave and 270Hz,1KHz and 2KHz modulation wave,besides the outside digital input modulation is also available.

Specification

Part Number	Description
GJ6560	GJ6560 ASE Broadband Laser Source

Technical parameters

	character	Min value	Typical value	Max value	Unit
Working wavelength range	Δλ	1528	--	1563	nm
Output optical power	Po	+13	--	+19	dBm
Stability of optical power	Ps	--	±0.02	--	dB
Isolation of output light	ISO	--	30	--	dB
Output return wave loss	RL	45	--	--	dB
Power consumption	Pc	--	--	20	W
Working voltage	V	110	--	240	V
Working temperature	Top	0	--	+60	℃
Storage temperature	Ts	-20	--	+70	℃
Optical connector	FC/APC (or SC/APC)				

Standard accessories

Power cord(AC90~260V), user manual, patchcord(FC/APC - FC/PC)

GJ6600 Series Bench-top Optical Attenuator

Description

GJ6600 series bench-top optical attenuator offers a wide range of optical attenuation value and keeps the specified attenuation value stable.

Digital adjustable method,the most advanced adjusting method, is used in this equipment so that the equipment can ensure a high accurate attenuation value.

The attenuation value is displayed on LCD screen directly. It also can be controlled by PC remotely to enhance the working efficiency.

Part Number		Description
GJ6600-xx-x-xx-xxx	-xx	60: Max attenuation value is 60dB 80: Max attenuation value is 80dB
	-x	S: single mode M: multiple mode
	-xx	FC: FC SC: SC G3:G3
	-xxx	PC: PC APC: APC

Features

- Adjusting the attenuation value by button makes the process accurate and fast
- Implementing the remote control function by USB or 232 serial port

Specification

Technical parameters

Working wavelength	1260~1640nm
Attenuation range	0~60dB(without insertion loss)
Resolution	0.01dB
Repeat ability	0.05dB(0~30dB); 0.1dB(30~60dB)
Insertion loss	3dB
Return loss	45dB
Connector type	FC/PC
Working tempterature	0~45°C
Power	110~220V 50Hz5%
Dimension	260mm*110mm*310mm
Attenuation accuracy (linear)	0.1dB(0~30dB); 0.4dB(30~60dB)

Standard accessories

Power cord(AC90~260V/50Hz), USB cord, adaptor(FC/SC/ST)

GJ6200 Bench-top Optical Power Meter

Description

Bench-top optical power meter is a high precision and wide range optical power detecting instrument aimed at factory and scientific research department.It also is a high cost performance testing instrument.

Part Number		Description
GJ6200-x-x-x-x	-x	I: internal detector O: external detector
	-x	A: detection range is +10~ -70dBm B: detection range is +26~ -50dBm
	-x	1:Φ1mm detection photosensitive surface 2:Φ2mm detection photosensitive surface 3:Φ3mm detection photosensitive surface
	-x	Y: with bare fiber adaptor N: without bare fiber adaptor

Features

- High precision, large dynamic range, auto zero adjustment, auto range
- 0.01dB display resolution
- Large TFT color screen
- Menu style operation , easy to use
- Integrated with various testing modes
- Including frequency signal output interface
- Including various communication interface
- Absolute power measuring
- Loss measuring
- Laser source stability measuring

Specification

Technical parameters	
Detector type	InGaAs (external 3000nm)
Detector size(selectable)	1000um, 2000um, 3000um
Testing wavelength(nm)	800~1700
Power range(dBm)	+10 to -70
Uncertainty	± 5% (±0.01nW)(tested in a @ 20±3℃ environment)
Resolution ratio(dB/dBm)	0.001(can be set)
Inside temperature display(℃)	0 to 40
Analog output(V)	0 to 5
Remote controlling interface	RS232/USB
Detector interface	FC/SC/ST; 2.5/1.25 multi-connector
Dimension	260mm*110mm*310mm
Weight	About 3kg

Standard accessories

Power cord(AC90~260V), FC&SC&ST connector , 1.25&2.5mm multi-connector

GJ6900 Series Bench-top Insertion/Return Loss Testing Meter

Description

GJ6900 series bench-top optical insertion/return loss testing meter provides a high reliable and stable performance. It is a multiple function optical testing meter which is integrated with dual-wavelength stable laser source, optical power meter, insertion loss tester and return loss tester. This testing meter can output 1310nm and 1550nm stable laser source when used as a optical laser source. As a optical power meter, it can measure the optical power at the wavelengths of 850nm,1300nm,1310nm, 1490nm, 1550nm and 1625nm. As a loss tester it can detect both insertion loss and return loss at the wavelengths of 1310nm and 1550nm of optical opponents.

This testing meter is strangely suitable for optical communication project as well as the research and manufacturing of the active and passive optical opponents.

Part Number		Description
GJ6900-xx	-xx	01: 1310/1550nm 02: 850/1300nm
-x-xx-x	-x	I: internal detector O: external detector
	-xx	01: detection photosensitive surface is Φ1mm 02: detection photosensitive surface is Φ2mm 03: detection photosensitive surface is Φ3mm
	-x	Y: with trample switcher N: without trample switcher

Features

- Bench-top, selectable modular type structure
- Stable laser source
- Using high precise optical detector
- User can easily switch among three testing modes: optical power meter mode, return loss mode and insertion loss mode
- Linear optical power and logarithm optical power display

Specification

Technical parameters	
Working wavelength	1310nm, 1550nm
Detecting range	0~80dB
Calibration wavelength	1310nm and 1550nm
Uncertainty	0~55dB : 0.4dB ; 55~75dB : 1dB
Display precision	0.001(can be set)
Parameters of power meter	
Calibration wavelength	850nm,1300nm,1310nm,1490nm, 1550nm,1625nm
Testing range	-70dBm~10dBm
Uncertainty	5%±0.1nW@1550nm23°C±3°C
Display precision	0.001(can be set)
Parameters of laser source	
Selectable wavelength	1310nm,1550nm
Output power	-2dBm±0.5dB
Stability	0.05dB/15min (23°C±3°C,tested after 30min warming-up)
Other	
Power	AC100~240V 50/60HZ
USB connection	Yes
Working temperature	0~+40°C
Storage temperature	-20~+70°C
Dimension	260mm×110mm×310mm
Weight	About 3kg
Standard accessories	
AC90~260V/50Hz power cord, user manual, USB cord, interchangeable connector(FC/SC/ST), patchcord(FC/APC-FC/PC, (FC/APC-FC/APC), mating sleeve adaptor(FC/APC)	

GJ600 Multi-channel Passive Device Loss Analyzer

Description

GJ600 can mearsure the loss of multi-channel passive device, readout insertion loss PLC quickly, and it is a reliable multi-functional instructment which intergated with DFB light source, optical power meter and IL meter. As a light source it could output 1310nm, 1490nm and 1550nm stably light source; as a optical power meter it could mearsure optical power of 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm wavelength;as a IL meter it could mearsure IL of passive device with 1310nm, 1490nm and 1550nm wavelength, espically AWG, splitter, 1*N passive optical device and etc.

Features

- Extremely high testing rate
- High accuracy of IL measurement
- Suitable for the test of optical passive opponents like AWG and 1*N splitter and etc,
- Flexible module design

Part Number		Description
GJ600-x-x -xx-x xx	-x	A: built-in 3 wavelength laser sources + visual laser source B: built-in 2 wavelength laser sources + visual laser source C: integrated with optical switcher, resolving external laser source interfaces + visual laser source
	-x	1: with automatic PDL function 2: without automatic PDL function
	-xx	08: 8channels 12: 12channels 16: 16channels
	-x	I: built-in sensor O: outlay sensor
	xx	01:Φ1mm detection photosensitive surface 02:Φ2mm detection photosensitive surface 03:Φ3mm detection photosensitive surface

Specification

Optical Power Meter Parameters	
Calibration wavelength	850nm,1300nm,1310nm,1490nm,1550nm,1625nm
Range	-60dBm~+10dBm
Precision	-60dBm~+10dBm：±0.35dB
Resolution	0.01
Light Source Parameters	
Applicable wavelength	1310nm, 1490nm, 1550nm
Power	≥ -5dBm±0.5dBm
Stability	0.05dB/15min@23°C±3°C
Other Parameters	
Power supply	AC100~240V 50/60Hz
USB	integrated
Working/storage Temperature	0~+40°C/-20~+70°C
Configuration	Main body , power patchcord, USB wire,CD

GJ800 Multi-channel Passive Device Testing System(MPO analyzer)

Description

GJ800 Multi-channel Passive Device Testing System is specialized in testing IL and RL of patchcord with MPO connector. This testing unit can measure two insertion optical powers simultaneously. By USB interface, power supply and data communication are available. Internal high-speed data collection circuit ensures a high data interchanging throughput. Special bare fiber adaptor meets the need of the coupling measurement demand of passive opponents.

Feature

- Applicable to test fanout patchcord with MPO connector.
- Equipped with Extinction grease, no need to twist and clean.
- Integrated with Internet port, could communicate with PC by Ethernet.
- Disassemblable testing interface panel, easy to maintenance.
- 100 results storage function

Part Number	Description	
GJ800-xxx-x -xx-xx-xxx	-xxx	MPO PLC
	-x	S: single-mode M: multi-mode
	-xx	08: 8 channels 12: 12 channels
	-xx	01: 850nm/1300nm 02: 1310nm/1550nm
	-xxx	APC UPC

Specification

light source parameter		
Applicable mode	Multi-mode (850nm,1300nm)	Single-mode (1310nm,1550nm)
Power	≥ -12dBm	≥ -8dBm
Stability	0.15dB/15min @23℃±3℃	0.05dB/15min @23℃±3℃
Number of channels	4,8,12 channels	
IL/RL testing parameters		
IL range	0 ~ 20 dB	
RL range	0 ~ 55 dB	0 ~ 75 dB
Diaplay resolution	0.01dB	
Other parameters		
Power supply	AC100 ~ 240V 50/60HZ	
Communication port	RS232 port, RJ45 network port	
Working temperature	0 ~ +40°C	
Storage temperature	-20 ~ +70°C	
Dimension	460mm*300mm*195mm	
Standard accessories		
AC90~260V/50Hz power cord, user manual, USB cable , G3 adaptor, Hexagon-wrench, serial-port line, net-line, CD disc		

EDFA Series Erbium Dropped Fiber Amplifier

Description

EDFA-B erbium dropped fiber amplifier is a single-wavelength power amplifier. It can be installed at the output port of the optical launcher to enhance the output optical power. This equipment can be applied to long-distance backbone network, access to MAN, SDH/PDH optical transmission system, single-channel optical transmission system and etc.

EDFA-C erbium dropped fiber amplifier is specially designed for CATV system. It ensures a high level signal-noise-ratio index and carrier-to-noise ratio.

Features

- Using advanced auto laser launcher power control circuit and thermoelectric refrigerator auto temperature control circuit to ensure the performance and extend life of the laser launcher.
- High output laser power,low noise index, working wavelength covers the whole C wave band

Specification

	EDFA-B	EDFA-C
Working wavelength	1530nm ~ 1565nm	1535nm ~ 1565nm
Input power range	-6dBm ~ +3dBm	-3dBm ~ +10dBm
Output power range	+13dBm ~ +25dBm	+13dBm ~ +25dBm

Part Number	Description
EDFA-B	EDFA-B Series Erbium Dropped Fiber Amplifier,1530nm ~ 1565nm

Part Number	Description
EDFA-C	EDFA-C Series Erbium Dropped Fiber Amplifier,1535nm ~ 1565nm

GJ6300 Series Bench-top Optical Switcher

Description

GJ6300 series optical switcher is a reliable, stable optical switcher. It is a multi-channel switching opponent which can control the laser transmission path.

In a optical transmission system, this equipment can be applied to multi-channel optical monitoring, LAN, interchanging of multi-laser source or multi-dector and protection switching of a Ethernet network.

In a optical testing system, this equipment can be applied to the testing of optical opponent, optical network and field optical cable as well to a optical multi-point monitoring system.

Features

- Low insertion loss
- Large wavelength range
- Low channel interruption

Part Number		Description
GJ63xx-x -xx-xx	xx	14: 4 channels optical switcher 18: 8 channels optical switcher
	-x	S: single mode optical switcher M: multiple mode optical switcher
	-xx	FC: FC SC: SC G3: G3
	-xx	PC: PC APC: APC

Specification

Technical parameters

	6314	6318
Channel count	1*4	1*8
Insertion loss	TYP : 1.0dB Max: 1.2dB	TYP : 1.0dB Max: 1.5dB
Working wavelength (selectable)	1250~1650nm	
Return loss	SM>60dB	
Channel interruption	65dB	
Return loss consistency	< 1.0dB	
Polarization loss	0.05dB	
Wavelength relative loss	0.25dB	
Temperature relative loss	0.25dB	
Repeat ability	0.02dB	
Life of equipment	times	
Transmission power	500mW	
Switching tiem	10ms	
Working temperature	0 ~ +40°C	
Storage temperature	-20 ~+70°C	
Power	100~240V 50Hz5%	
Dimension	260mm*110mm*310mm	

Standard accessories

Power cord(AC90~260V/50Hz), user manual, CD disk

OPM Series High Precision Optical Power Testing Module

Description

OPM series high-precision optical power testing modular is designed for the testing environment of various automatical equipment, intergration system and etc.It can be embeded into users'testing system. This testing unit can measure two insertion optical power simultaneously. By USB interface, power supply and data communication are available. Internal high-speed data collection circuit ensures a high data interchanging throughput. Special bare fiber adaptor meets the need of the coupling measurement demand of passive opponents.

Part Number	Description
OPM2000	OPM-2000 Series Dual-Channel High Precision Optical Power Testing Module

Features

- Open communication interface protocol for the further development of PC application
- Various interface command types for loading, calibration and switching data
- Special bare fiber adaptor for the optical power measurement of bare fiber
- Selectable 5'' TFT colour LCD screen
- Small dimension, nice feature, can be easily embeded in users's testing system

Part Number	Description
OPM1000	OPM-1000 Series Single Channel High Precision Optical Power Testing Module

Specification

Detector type	InGaAs
Photosensitive surface diameter	1mm(FC interface)/3mm(bare fiber adaptor interface)
Detector interface	FC/SC/ST, bare fiber adaptor
Wavelength range	800～1700nm
Measurement wavelength	850/1300/1310/1490/1550/1625 nm
Power range	-70～+10dBm
Measurement precision	±0.2dB
Communication interface	B type USB, aero plug
Working voltage	5V±20%(supplied by USB or aero plug)
Working current	10～25mA(OPM1000), 10～30mA(OPM2000)
Working temperature	-20～+50℃
Storage temperature	-40～+70℃
Dimension	115×45×45mm(OPM1000), 115×90×45mm(OPM2000)
Weight	Yes
Weight	About 300g (OPM1000), about 450g(OPM2000)
Accessories	USB cord, a data disk, a pair of bare fiber clamp